Perceptions of Risks in Chronic Kidney Disease among Patients, Clinicians and Administrators

Helen Chiu1*, Navdeep Tangri2, Ognjenka Djurdjev3,4, Brendan J. Barrett5, Brenda Hemmelgarn6, Francois Madore7, Claudio Rigatto2, Norman Muirhead8, Manish M. Sood2, Catherine M Clase5, Adeera Levin4,9

1Providence Health Care Research Institute, Vancouver, BC, Canada, 2University of Manitoba, Winnipeg, MB, Canada, 3Provincial Health Services Authority, BC, Canada, 4BC Provincial Renal Agency, Vancouver, BC, Canada, 5Memorial University of Newfoundland, St. John’s, NL, Canada, 6University of Calgary, Calgary, AB, Canada, 7University of Montreal, Montreal, QC, Canada, 8University of Western Ontario, London, ON, Canada, 9University of British Columbia, Vancouver, BC, Canada

BACKGROUND: Clinical trajectories of patients with chronic kidney disease (CKD) are highly variable. Understanding appropriate time horizons and considerations associated with prediction of risks of key outcomes (renal failure, cardiovascular (CV) events & death) is important in facilitating decision-making and addressing the needs of the patients and kidney care providers. We aimed to determine the importance of specific time frames for prediction of key outcomes, from the perspective of patients, nephrologists and renal administrators, and to assess needs and establish possible uptake of prediction tools among these groups.

METHODS: Online surveys were developed for each group of stakeholders and deployed nationally through the Kidney Foundation of Canada, provincial renal networks and CANN-NET. Anonymous responses gathered over a 4-month period were descriptively analyzed.

RESULTS: Over 270 respondents across Canada participated in the surveys. Patients deemed personal risks of needing renal replacement therapy and developing heart disease as similarly important over all time horizons (1-15 years). Both nephrologists and administrators felt that the time horizons of 1-5 years are most relevant in their roles. Most are not satisfied with their current ability to predict the progression to renal failure, CV events and death, with the ability to predict CV events and death being the most dissatisfying for them. Nephrologists commented that they incorporate slope of eGFR in decision-making. Importantly, all groups would use risk scores with improved accuracy, if available, to predict specific outcomes.

CONCLUSIONS: Patients, clinicians and administrators have slightly different time horizons that deem important for predicting CKD outcomes; however, all agree that there is a need to improve risk prediction. These perspectives from patients and other stakeholders provide valuable information for developing research for predicting patient-centered outcomes.